

## CLAIMS

We claim:

- 1        1. A method comprising:
- 2        applying an inverse wavelet transform to data repeatedly for a
- 3        plurality of decomposition levels; and
- 4        clipping, after each application of the inverse wavelet transform, any
- 5        value generated as a result of application of the inverse wavelet transform
- 6        that exceeds a predetermined range associated with that decomposition
- 7        level subband of the inverse wavelet transform.
- 1        2. The method defined in Claim 1 wherein the inverse wavelet
- 2        transform comprises a 5,3 wavelet transform filter.
- 1        3. The method defined in Claim 1 wherein the inverse wavelet
- 2        transform comprises a 9,7 wavelet transform filter.

1 4. ~~An article of manufacture comprising one or more recordable~~  
2 media having executable instructions stored thereon which, when executed  
3 by a machine, cause the machine to:

4 apply an inverse wavelet transform to data repeatedly for a plurality  
5 of decomposition levels; and

6 clip, after each application of the inverse wavelet transform, any  
7 value generated as a result of application of the inverse wavelet transform  
8 that exceeds a predetermined range associated with that decomposition  
9 level, subband and inverse wavelet transform.

1 5. The article of manufacture defined in Claim 4 wherein the  
2 inverse wavelet transform comprises a 5,3 wavelet transform filter.

1 6. The article of manufacture defined in Claim 4 wherein the  
2 inverse wavelet transform comprises a 9,7 wavelet transform filter.

1 7. An apparatus comprising:  
2 means for applying an inverse wavelet transform to data repeatedly  
3 for a plurality of decomposition levels, and

4     ~~means for clipping, after each application of the inverse wavelet~~  
5     transform, any value generated as a result of application of the inverse  
6     wavelet transform that exceeds a predetermined range associated with that  
7     decomposition level, subband and inverse wavelet transform.

1         8.     The apparatus defined in Claim 7 wherein the inverse wavelet  
2     transform comprises a 5,3 wavelet transform filter.

1         9.     The apparatus defined in Claim 7 wherein the inverse wavelet  
2     transform comprises a 9,7 wavelet transform filter.

1         10.    A method comprising:  
2         applying a forward wavelet transform to input data in a 4:x:x format  
3         to generate encoded data, where x is not equal to 4; and  
4         quantizing level 1 coefficients in high-low (HL) and high-high (HH)  
5         subbands to zero, such that the encoded data resembles 4:4:4 formatted data.

1         11.    The method defined in Claim 10 further comprising quantizing  
2     level 1 coefficients in a low-high (LH) subband to zero.

1       ~~12. The method defined in Claim 11 wherein the input data is 4:1:1~~  
2 formatted data.

1       13. The method defined in Claim 10 wherein the input data is 4:2:2  
2 formatted data.

1       14. An apparatus comprising:  
2 means for applying a forward wavelet transform to input data in a  
3 4:x:x format to generate encoded data, where x is not equal to 4; and  
4 means for quantizing level 1 coefficients in high-low (HL) and high-  
5 high (HH) subbands to zero, such that the encoded data resembles 4:4:4  
6 formatted data.

1       15. The apparatus defined in Claim 14 further comprising means  
2 for quantizing level 1 coefficients in a low-high (LH) subband to zero.

1       16. The apparatus defined in Claim 11 wherein the input data is  
2 4:1:1 formatted data.

1        ~~17. The apparatus defined in Claim 10 wherein the input data is~~  
2        ~~4:2:2 formatted data.~~

1        18. An article of manufacture comprising one or more recordable  
2        media having executable instructions stored thereon which, when executed  
3        by a machine, cause the machine to:  
4                apply a forward wavelet transform to input data in a 4:x:x format to  
5        generate encoded data, where x is not equal to 4; and  
6                quantize level 1 coefficients in high-low (HL) and high-high (HH)  
7        subbands to zero, such that the encoded data resembles 4:4:4 formatted data.

1        19. The article of manufacture defined in Claim 18 further  
2        comprising quantizing level 1 coefficients in a low-high (LH) subband to  
3        zero.

1        20. The article of manufacture defined in Claim 19 wherein the  
2        input data is 4:1:1 formatted data

1        21. ~~The article of manufacture defined in Claim 18 wherein the~~  
2        ~~input data is 4:2:2 formatted data.~~

27

9/2/20

[illegible]